

UNITED STATES PATENT AND TRADEMARK OFFICE

ENITED STATES DEPARTMENT OF COMMERCE Enited States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandris, Virginia 22313-1450 tww.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
09/963,872	09/25/2001	Ho-Jin Kweon	47173/DBP/Y35	9178	
23363	7590 09/20/2004	•	EXAM	EXAMINER	
CHRISTIE, PARKER & HALE, LLP PO BOX 7068			TALBOT, BRIAN K		
PASADENA, CA 91109-7068			ART UNIT	PAPER NUMBER	
			1762		

DATE MAILED: 09/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
Office Antinu Communication	09/963,872	KWEON ET AL.				
Office Action Summary	Examiner	Art Unit				
	Brian K Talbot	1762				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply if NO period for reply is specified above, the maximum statutory period we Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	6(a). In no event, however, may a reply be tim within the statutory minimum of thirty (30) days ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	ely filed will be considered timely. the mailing date of this communication.				
Status						
1) Responsive to communication(s) filed on 09 Au	<u>igust 2004.</u>					
_						
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4)⊠ Claim(s) <u>1-7,9,11-17,19,21-27 and 29</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-7,9,11-17,19,21-27 and 29</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or	election requirement.					
Application Papers						
9)☐ The specification is objected to by the Examiner	_					
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11)☐ The oath or declaration is objected to by the Exa	aminer. Note the attached Office	Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:						
1. Certified copies of the priority documents have been received.						
 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage 						
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
and the second s	The solution of the solution o					
Attachment(s)						
1) Notice of References Cited (PTO-892)	4) 🔲 Interview Summary (I	PTO-413)				
2) Dotice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date	e				
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	5)	tent Application (PTO-152)				
	· 					

Application/Control Number: 09/963,872

Art Unit: 1762

1. The amendment filed 8/9/04 has been considered and entered. Claims 8 and 18 have been canceled. Claims 1-7,9,11-17,19,21-27 and 29 remain in the application.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 103

3. Claims 1-7,9,11-17,19,21-27 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang (5,733,685) in combination with Amatucci et al. (5,705,291).

Wang (5,733,685) teaches a method of treating lithium manganese oxide spinel that involves heating the lithium manganese oxide spinel in an atmosphere of an inert gas that does not react with the spinel. The spinel is coated with a hydroxide, preferably lithium, sodium or potassium and then heated in an atmosphere of inert gas at elevated temperatures (abstract and col. 4, line 40m- col. 9, line 50).

Wang (5,733,685) fails to teach the incorporation of B, Al Ga, Si, Ge, Sn or As.

Amatucci et al. (5,705,291) teaches rechargeable battery cell having a surface-treated lithiated intercalation positive electrode. The coating can include a borate, aluminate, lithiated silicates or lithiated aluminates (abstract).

Therefore, it would have been obvious for one skilled in the art at the time the invention was made to have modified Wang (5,733,685) process by incorporating elements disclosed by

Application/Control Number: 09/963,872

Art Unit: 1762

Amatucci et al. (5,705,291) because of the reasonable expectation of achieving similar success as well as an improved reduction in self-discharge as disclosed by Amatucci et al. (5,705,291).

Response to Amendment

4. Applicant's arguments with respect to claims 1-7,9,11-17,19,21-27 and 29 have been considered but are most in view of the new ground(s) of rejection.

Applicant argued that Wang (5,733,685) fails to teach the incorporation of B, Al Ga, Si, Ge, Sn or As.

The Examiner agrees, however, Amatucci et al. (5,705,291) teaches this limitation.

Amatucci et al. (5,705,291) teaches rechargeable battery cell having a surface-treated lithiated intercalation positive electrode. The coating can include a borate, aluminate, lithiated silicates or lithiated aluminates (abstract).

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

Art Unit: 1762

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian K Talbot whose telephone number is (571) 272-1428. The examiner can normally be reached on Monday-Friday 6AM-3PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shrive P Beck can be reached on (571) 272-1415. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

> Brian K Talbot **Primary Examiner**

B-Kralt 9/16/04

Art Unit 1762